A. COURSE INFORMATION

<table>
<thead>
<tr>
<th>Course number/section</th>
<th>Class meeting time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1308.002/102</td>
<td>TR 8:00am-09:50pm</td>
</tr>
<tr>
<td>BIOL 1308.003/103</td>
<td>TR 12:00pm-01:50pm</td>
</tr>
<tr>
<td>BIOL 1308.004/104</td>
<td>MW 9:00am-10:50am</td>
</tr>
</tbody>
</table>

Class location: EN201
Course Website: (Blackboard Portal): https://bb9.tamucc.edu/

B. INSTRUCTOR INFORMATION

Instructor: Dr. Michelle Cortez
Office location: Engineering Building, EN-311
Office hours: Tuesday & Thursday 10am - 11:30am
Wednesday 1:30 – 3:30pm
Telephone: (361) 825-3259
E-mail: michelle.cortez@tamucc.edu
Appointments: A student may make an appointment to see me at times other than the scheduled office hours. I am available for consultation and extra help, but it is the student’s responsibility to request such help. If I am unavailable during office hours, I will post a note on my office door. I prefer communication via email; please include class section in email subject line.

C. COURSE DESCRIPTION

Catalog Course Description
This is a non-majors course in which students will learn basic biological principles, identify the relevance of science in everyday life, and will understand the scientific method. Hands-on lab activities will reinforce course concepts. This course does not substitute for biology (BIOL) 1406/1407 for science majors.

D. PREREQUISITES AND COREQUISITES

Co-requisites - You must be registered for BOTH COMPONENTS of this course: BIOL 1308.00 X & BIOL1308.10 X and you must complete the Safety Seminar, (SMTE 0091), prior to lab.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

REQUIRED Text (s)


INTERNET AND WEBSITE REQUIREMENTS:
This course requires the use of the internet (including use of student islander TAMU-CC email
account, course Blackboard pages, and worldwide web) to foster the technological abilities of the student. All students are expected to subscribe to and utilize the course Blackboard account regularly.

Supplies and Other Requirements:
- Note taking supplies are required for class.
- Access and use of the class BlackBoard page is required.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

Course Objectives: The primary objective of this course is to acquaint non-science majors with the process of science and major concepts in biology needed to make informed decisions in their life as responsible citizens. Major concepts include:

- **Biology Basics**
  - What is living?
  - Scientific Method
  - Classification & Organization
  - Immune system, bacteria, viruses, and other cells

- **Energy & Metabolism:**
  - Are we alone in the universe? – Water, biochemistry
  - Energy drinks

- **Cancer:**
  - Cells
  - DNA
  - Mitosis and meiosis

- **Genetics**
  - Are you only as smart as your genes? – Mendelian genetics.
  - DNA Detective – Complex patterns of inheritance and DNA fingerprinting.
  - Gene expression, mutation and cloning.

- **Evolution**
  - Where did we come from? – The evidence for evolution.
  - An evolving enemy – natural selection
  - Who am I? – species
  - Prospecting for biological gold – biodiversity and classification

- **Ecology**
  - Is the human population too large? – population ecology
  - Conserving biodiversity community and ecosystem ecology
LECTURE AND LAB SCHEDULE

- Where do you live? – Climate and biomes

- Animal Structure and Function
  - Organ donation – tissues, organs and organ systems
  - Clearing the air – respiratory, cardiovascular, and urinary systems
  - Sex differences and Athleticism – Endocrine, skeletal and muscular systems
  - Is there something in the water? - Reproductive and Developmental biology
  - Attention deficit disorder – brain structure and function

- Plant Biology
  - Feeding the World- plant structure and growth.
  - Growing a green thumb – plant physiology

Student Learning Outcomes:

Students who complete this course will:

1. Experience for themselves the process of scientific inquiry and experimentation.
   - Construct hypotheses, identify relevant variables, and design experiments to test hypotheses.
   - Generate and analyze data using computer-assisted technologies.
   - Gain skills interpreting graphs and tables and using mathematics and statistics to evaluate data.
   - As a result, students will be able to distinguish between science and pseudo-science.

2. Appreciate the importance of ethics in science.
   - Understand the vital importance of an ethical approach to scientific inquiry.
   - Explore ethical issues that new technologies raise when applied to human society and to our biosphere.

3. Develop a working understanding of major biological concepts.
   - Evolution is the major unifying theme in biology.
   - Bioethics involved in biological decision making.

4. Learn to work as a part of a collaborative team in problem solving and will engage with other students in the learning process.
   - Practice scientific terminology.
   - Apply biological principles and the process of scientific inquiry to real-world problems.
   - Demonstrate their abilities to explain processes and relationships in a logical and precise manner.

5. Improve problem-solving skills and build abilities to critically evaluate scientific information.
   - Analyze claims of others as presented in the popular press, movies, and television.
   - Recognize that scientific understandings and the scientific process of inquiry are relevant to everyday life decisions.

Communication skills are improved through the development of both oral and written skills. Students will be introduced to appropriate scientific communication skills through technical writing and scientific presentation exercises. Students will have the opportunity to convey concepts by learning to represent information in illustrations, charts, and graphs and also through oral presentations.
LECTURE AND LAB SCHEDULE

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course uses a variety of instructional methods and activities in order to facilitate student’s learning, including but not limited to: Connect, LearnSmart, PowerPoint lectures, labs, group activities, student projects, research, presentations, quizzes, outside readings, supplemental questions, and homework.

H. MAJOR COURSE REQUIREMENTS AND GRADING

GRADE COMPUTATION:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory average (lab reports, quizzes, assignments, etc.)</td>
<td>300</td>
</tr>
<tr>
<td>Exams</td>
<td>400</td>
</tr>
<tr>
<td>In Class Assignments/Homework</td>
<td>100</td>
</tr>
<tr>
<td>Comprehensive Final</td>
<td>100</td>
</tr>
<tr>
<td>Presentations</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
</tr>
</tbody>
</table>

Letter Grades: Your final letter grade is based on the combined average in lecture, lab, and Project.

\[ A \geq 90\% > B \geq 80\% > C \geq 70\% > D \geq 60\% > F \]

Grades are put into Blackboard as quickly as possible. Students should check Blackboard for their current lecture and lab grades, noting which assignments are recorded in Blackboard.

It is the student’s responsibility to check grades in Blackboard on a daily basis. **Once grades are posted in Blackboard, the student will have one week in which to address any errors regarding the grade** by bringing an error to the instructor’s attention immediately, so that the instructor can correct an error and address any question in a timely manner.

- I will correct clerical, mathematical, and/or other instructor grade errors. However, it is student’s responsibility to check grades in Blackboard. **Once grades are posted in Blackboard, the student has only one week in which to address any errors regarding the grade.** So, you have **only one (1) week to notify me** of such errors (after the grades are posted on Blackboard or after an assignment, quiz or examination is returned) or **the grade will stand.**

- **I will not change a legitimate course grade just because you “need” it (for financial aid, to get into professional school, etc.).** The grading section of this syllabus describes how grades are computed. Please be sure you maintain a high enough average to get the grade you want. You have plenty of help available in this class. Take advantage of the resources offered, such as reviews, CASA, SOAR, and tutoring. The reasons for receiving a grade of “I” (incomplete) are clearly defined in the University Catalog; this “grade” cannot and will not be used simply to prevent a student from receiving an unwanted grade in a class.

- **I will only discuss grades in person, in my office** (i.e., I do not discuss grades or matters relating to grades over the telephone, by e-mail, or in the classroom during or after class). If you wish to know your final grade before the official grade report is mailed to you, it is best to please see me in person or provide me with a self-addressed, stamped envelope.
LECTURE AND LAB SCHEDULE

TESTS AND EXAMS

There will be four major exams (100 points each), taking questions for these tests primarily from material covered in the lectures, from handouts and other assignments, and from readings in the textbook and assignments. The comprehensive final can replace your lowest test grade.

Exams may consist of essay, short-answer, compare-contrast, fill-in-the-blank, multiple-choice, matching, making and/or labeling drawings, and/or various types of “flex” questions (i.e., any type of question is fair game). The exams cover material from a specific section of the course.

The final examination is comprehensive (i.e., covers material from the entire semester).

- **During any exam**, if you leave the examination room—for any reason—you must turn in your exam and answer sheet and you will not be allowed to resume the examination. Attend to personal matters (e.g., restroom visits) before the examination.
- Be on time for exams! Anyone arriving after a student has completed an examination will not be allowed to take that examination.
- Students arriving to class late for an exam may not be allowed to start the exam, depending on if any student has completed the exam and left the room, how late the arriving student is, and how much time is left for the exam. **It is up to the instructor.** Students arriving late to an exam, but who are allowed to take the exam, will not be allowed to continue to work on the exam after the last on-time student completes their exam.
- Cheating and plagiarism are unacceptable behaviors. Cheating will result in a zero on the exam and students will be asked to withdraw from the course.
- **Cell phones, computers, (including “smart watches” – such as “Apple Watches”) are not permitted to be with the student during exams.** Any student found with these types of devices will be considered cheating and will receive a zero for the exam. All violations of the school’s Academic Integrity policies will be reported.

**Quizzes:**
Quizzes may be given at any time, announced or unannounced, at the beginning of class, middle of class, end of class, online, or take-home. These may be fill in the blank, multiple choice, short answer or essay questions. If you miss a quiz, it will count as a 0 and cannot be made up. Quizzes, homework, projects, and class assignment grades are combined together for the “assignment” portion grade.

**Other Assignments:** Other class assignments will be required to be completed and will be used in grade calculations. I do not accept late work, all assignments must be completed on time. Assignments are announced in class and grades are posted on Blackboard.

There will be assignments, homework, and quizzes given in class. These may include pop quizzes, data interpretation, experimental design, seminar attendance, etc. They may be due at the start of the next lecture class, but some assignments may be in-class only and makeups are not possible. You are encouraged to get together and work on them as a group. However, unless specified otherwise,
LECTURE AND LAB SCHEDULE

the assignments must be turned in individually and be written *in your own words, NOT COPIED*. An assignment grade of ZERO will be given if the work is not in your own words.

Laboratory: Laboratory activities will contribute 30% of the final course grade. Please see the schedule for details of these activities.

All assignments, all quiz, and all examination answers must be *legible* to the Instructor. If I cannot read it, I cannot grade it, so *illegible answers and illegible papers will receive a zero* (0) grade.

Final:  [http://registrar.tamucc.edu/Register%20for%20Classes/Final_Exams.html](http://registrar.tamucc.edu/Register%20for%20Classes/Final_Exams.html)

FALL 2018 FINAL EXAMINATION SCHEDULE

Biol 1308.002/102  Tuesday May 7  8:00am-10:30am
Biol 1308.003/103  Thursday May 9  11:00am-1:30pm
Biol 1308.004/104  Wednesday May 8  8:00am-10:30am

I.  **COURSE CONTENT/SCHEDULE**

   The course calendar will be posted on Blackboard.

   Exam dates: Specific due dates and exam dates will be posted on Blackboard
<table>
<thead>
<tr>
<th>Wk</th>
<th>TOPIC</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1  | Introductions                | Who are you?  Who am I?  
    |                              | Read & submit: Info for Instructor; Class protocols; Review: PROJECT ASSIGNMENT |
| 2  | Characteristics of Life      | Complete Lab safety course  
    |                              | Characteristics - What defines life, living things?  
    |                              | Scientific Method assignment |
| 3  | MT Scientific Method         | Article assignment  
    |                              | Scientific Method (& Steps)  
    |                              | Scientific Method Lab (variables, data) |
| 3  | Science Info                 | Where do you get your info?  
    |                              | Compare articles, “fake” news  
    |                              | Article Presentation |
| 4  | Exam #1                      |                                                                         |
| 4  | Classification System        | Classification System / Organization / Dichotomous key |
| 5  | DIET & ENERGY                | Biomolecules/Organic Molecules/Macromolecules  
    |                              | Energy Drinks |
| 6  | DIET & ENERGY                |                                                                         |
| 7  | DIET & ENERGY                |                                                                         |
| 8  | Presentations                | Nutrition Group Presentations |
| 8  | Exam #2                      |                                                                         |
| 9  | SPRING BREAK                 |                                                                         |
| 10 | CANCER                       |                                                                         |
| 11 | CANCER/GENETICS              |                                                                         |
| 12 | GENETICS                     | Genetics Presentations |
| 13 | Exam #3                      |                                                                         |
| 13 | EVOLUTION                    |                                                                         |
| 14 | EVOLUTION/ECOLOGY            |                                                                         |
| 15 | ECOLOGY                      | Ecology Group Presentation |
| 16 | Exam #4                      |                                                                         |
| 17 | FINAL                        | See finals SCHEDULE IN SYLLABUS |
The schedule may require adjustment. Additional assignments may or may not be provided at the Instructor’s discretion. Such assignments might include homework, group projects, reading assignments, quizzes, etc. Every attempt will be made to follow the time and evaluation schedules shown here. It is the student’s duty to attend each class and regularly access the class BlackBoard page to be aware of all assignments, deadlines, and changes to such.

J. COURSE POLICIES

ATTENDANCE POLICIES
Attendance is mandatory. Excused absences require contacting the instructor. Students with a university approved scheduled absence (athletics, military duty, etc.) MUST contact the instructor well in advance of a scheduled absence.

You are responsible for the material covered and assignments made in every lecture regardless of whether you attend it. “I came in late and didn’t hear about the assignment,” is never an acceptable excuse. It is always your responsibility to determine what happened in class during your absence.

Family vacations and celebrations of your birthday are worthwhile, but are not classified as excused absences. If you book an airplane flight or non-emergency appointment which conflicts with class, I do NOT consider that to be an excused absence. Routine events should be scheduled to avoid class conflicts. In general, only unavoidable and documented absences are excused (major family illness or accidents, deaths, funerals).

Unacceptable Excuses: Only unavoidable, documented absences are excused (see above), so you should schedule routine personal events (e.g., vacations, wedding, reunions, non-emergency medical or dental visits, parent-teacher conferences, household or auto repairs) to avoid conflicts with your classes. Oversleeping is never an acceptable excuse. Employment conflicts are not acceptable excuses for absences, tardiness, or leaving class early. Texas waves jury duty for students, so jury duty is not an acceptable excuse. If you arrange to take any test at an alternate time and do not show for that appointment, you then forfeit the opportunity to take the test except at its originally scheduled time.

It is the responsibility of the student to obtain any material missed during an absence from his/her classmates. It is always your responsibility to determine what happened in class or laboratory during your absence. If you are absent, you must obtain any handouts or assignments from me in my office on your own time: I rarely bring assignments to class more than once. You must obtain class notes from other students.

Exceptional circumstances may warrant deviating from these guidelines (including administering a “make-up” examination). This also applies to any situations for which you cannot provide an acceptable excuse as outlined above.

Late Work and Make-up Exams
Quizzes, Labs, and points missed because of an **unexcused absence** (including tardiness and leaving early) **cannot be made up**. An excused absence (with documentation) allows me to make alternative arrangements for completing SOME assignments. The **documentation** required for an absence to be excused must be:

- From an **appropriate source** (e.g., doctor, dentist, funeral director) who states the nature of the event that caused (or will cause) your absence.
- **Written, on official stationary, and signed.** *(I do not return excuses to you)* Telephone calls, FAXes, and e-mails are not acceptable.
- Presented to me **prior to** the absence for a **scheduled** event (e.g., university-sponsored activity, recognized religious holiday, military service).

**DEADLINE TO ACCEPT LATE WORK FOR EXCUSED ABSENCES:** WORK MUST BE TURNED IN **IMMEDIATELY UPON RETURNING TO CLASS**.

- With instructor’s permission, missed assignments for an unexpected EXCUSED absence may be given an extended due date, but no more than ONE (1) WEEK after student’s return to school date.
- **ALL LATE WORK** accepted for excused absences must **be turned in to MY OFFICE,** **not DURING CLASS,** and NOT in the class room right before or after class within one week.
- It is the STUDENT’S responsibility to know what has been assigned and what is due. Regardless, allowed late work must be turned in within stated time.

If you know you will be not be in class, **you may turn in assignments early.** Except for excused absences, late assignments will **not** be accepted. If you know in advance that you will have an excused absence when an assignment is due, you **must** turn in that assignment before its due date. You should turn in overdue assignments which were missed because of an unexpected, excused absence, immediately upon returning to class.

For some scheduled events (athletics, military duty, etc.), you may arrange to take a lecture examination **before (not after)** its scheduled date. *(You should take a test as close to its originally scheduled time as possible, but you may **not** take a test more than one week before its originally scheduled time. You must obtain your instructor’s approval **at least one week before** you wish to take the pre-test). If you arrange to take any test at an alternate time and do not show for that appointment, then you forfeit the opportunity to take the test except at its originally scheduled time. Students who do not arrange to take examinations in advance will not be eligible for this special consideration. A written excuse from the university department involved or from the Office of Student Engagement and Success is required.

In general, **there are NO individual make-up examinations.** IF you miss an exam with an excused absence, that will be the dropped exam grade for the semester. No makeup exams will be allowed for an unexcused absence. At the **discretion of the instructor,** a missed test for an **excused** absence may be a dropped test grade or may be a make-up exam given at a date selected by the instructor, including make up exams given the last week of the semester.
Cell Phone & Laptop Use
No cell phone, computer, iPad, smart watch, etc. use during class or tests unless specified or approved by instructor. TEXTING – not during class or lab. Use of devices that can connect to the internet are not allowed during instruction or exams. For emergency purposes, (you must discuss with me first), you may have your cell phone ON SILENT, on your desk – not on your lap. If you get an emergency call, or text, please take it outside. Cellular phones and other “beepers” must be silenced BEFORE entering classroom.

Participation
All students are expected to attend the full class and lab periods, well prepared to discuss the required reading assignments, complete all assignments, and to participate in class discussions. A portion of your grade is earned by participation. Group work, class activities, labs, and quizzes cannot be made up. So, attendance and active participation in class are required of all students.

Other/Misc.
ASSIGNMENTS are due on time. I do not accept late work. If you don’t understand an assignment, please do NOT wait until 10:00 the night before it is due to contact me about it. The same goes for studying for a test – please don’t wait until the last minute to demonstrate that you haven’t started studying yet. Procrastination on your part does NOT constitute an emergency on my part.

K. COLLEGE AND UNIVERSITY POLICIES

• Academic Integrity (University)
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

• Classroom/Professional Behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

• Statement of Civility
Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

• **Deadline for Dropping a Course with a Grade of W (University)**
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. **Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.** Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day to drop a class.

• **Grade Appeals (College of Science and Engineering)**
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University [Procedure 13.02.99.C2.01](http://www.tamucc.edu/provost/university_rules/index.html), Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html) and the College of Science and Engineering Grade Appeals webpage at [http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• **Disability Accommodations**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for
assistance at (361) 825-5816. http://disabilityservices.tamucc.edu/

• Statement of Academic Continuity
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. OTHER INFORMATION

• Academic Advising
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361)825-3928.

GENERAL DISCLAIMER

• I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods and post the changes to the class Blackboard page.